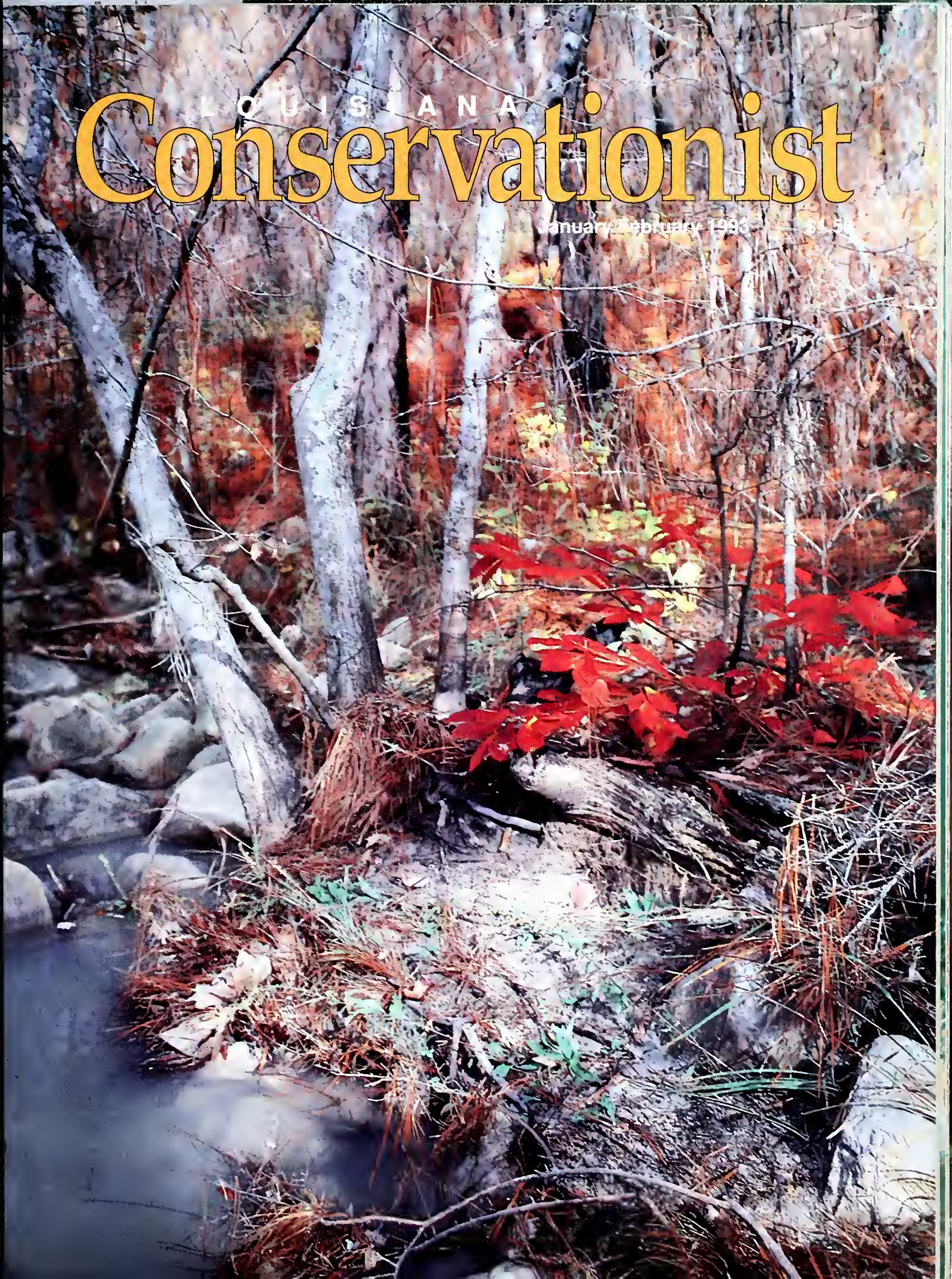
LOUISIANA
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January-February 1993

Joe L. Herring, Secretary

## Comments

Four months have passed since Hurricane Andrew. Many victims have restored their lives and possessions to some semblance of order. Others continue the struggle back from disaster. Here at the Department of Wildlife and Fisheries, we count ourselves lucky. There was substantial damage, but no deaths nor serious injuries to employees, many of whom had to expose themselves to the force of the storm.

As usual, adversity revealed the best, and worst, in human nature. The former occurred when Enforcement Sergeant Brian Spillman and West Feliciana Deputy Sheriff Steve Neal linked themselves with rope and waded into the churning Mississippi River to rescue a crewman from a doomed tugboat.

A less dramatic example arose after the hurricane passed. Fish kills in the Atchafalaya Basin and nearby waterbodies were stunning. Our biologists estimated nearly 200 million fish were dead. The highly productive fishery in the fabled Atchafalaya Basin was destroyed. Natural recovery would take three, four, ...perhaps five years.

A vocal few were "churning the waters" before the situation could be properly assessed by fisheries biologists. Impractical, and even impossible solutions were proposed and demanded.

In the background, a cadre of sportsmen linked themselves to our professional fisheries scientists and waded into the churning waters to "save" the Basin. An organization of individual sport fishermen, Bass Clubs and Marine/Sporting Goods dealers sprang up to work closely with the department to enhance restocking efforts. Fish caught in other areas would be held in livewells. Instead of being eaten, they would be released in the Basin.

The department's Inland Fish Division set up holding tanks at Thomas Marine in Gonzales, the Spillway Sportsman in Brusley, and at the Country Station in Broussard. The tanks provide a central location for the collection of live fish "donated" by recreational anglers for the restocking effort. Fisheries biologists tag the fish and transport them to selected release sites.

Stocking mature, spawning age fish will bolster the department's program to stock millions upon millions of fry and fingerlings. Our biologists, by tracking the released fish, will gain a wealth of data about fish in the Basin.

Additional assistance came from varied sources. The U.S. Fish and Wildlife Service will provide largemouth bass, bream and catfish fingerlings. Texas offered half-a-million Florida bass. Other offers came from as far as South Carolina.

The recovery of recreational fishing in the Atchafalaya Basin still will not be overnight. It will take time...but it will take less time. That, once again, is due to the efforts of "Hunters and Fishermen...The Real Conservationists."

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Photo by LDWF

# BOWHUNTING FOR Whitetails

BY CHRIS BERZAS

Bowhunting for whitetails during the late season is an effective way for the hunter to wind up with venison on the table or an antlered trophy for the wall. Bayou State bowhunters are a privileged lot. With a deer hunting season of approximately 112 days, archers can experience real whitetail lagniappe, especially in the early and late parts of the season.

According to the 1991-92 Louisiana Big and Small Game Harvest Survey administered by the Louisiana Department of Wildlife and Fisheries (LDWF), Louisiana bowhunters took full advantage of such opportunities as an estimated 44,600 bowhunters averaged 13.1 days afield with an approximate whitetail harvest of 17,700 animals. These statistics reveal success for Louisiana bowhunters in terms of venison on the table and antlers on the wall.

It certainly is no secret that some of the best time spent enjoying the sport is in the late season, especially in January. Multitudes of hunters who use firearms have already left the woods, taking with them much human scent, sound and smoke. Moreover, trees are now bare of foliage and ground cover is quite sparse due to the cold season, and these factors enable bowhunters to more easily view the habits and rituals of their quarry.

Also, if you happen to hunt in areas 1, 4 and 6, the rut continues its peak to mid-January, allowing the chance to possibly score on a wallhanger of a lifetime. The

peak of the rut in this sense refers to the observation that the majority of the does in these areas come into 'estrus' or what's better known as physiological heat at this time.

When following does in estrus, rutting bucks have been known to throw caution to the wind and become readily observable in the daytime. Such male whitetails leave their sanctuaries and may travel long distances in search of receptive partners. Even feeding behaviors fall second to the urge to mate with a receptive female.

Biologists with the LDWF are able to ascertain the timing of the rut in specific areas by obtaining samples of reproductive organs of harvested does taken within Wildlife Management Areas (WMAs) or leases participating in the LDWF Deer Management Assistance Program (DMAP). Therefore, hunting seasons within respective areas are scheduled with the aid of biologists' findings obtained from such sampling.

Although much of the above serves to inform the bowhunter about deer physiology and behavior, much more information is necessary in order to also score on a whitetail at this time of the year.

One avid archer hunting on land coinciding with the peak of the rut in January is Cleve Womack of Jonesville. Womack's hunting lease is located on land adjacent to Red River and Three River WMAs in Concordia Parish and this hunter's advice should suffice for these public lands as well.

"I find that bucks are more active in this area during the first two weeks of January," says Womack. "They'll be seen cruising the woods in search of does, and it's a good time for a bowhunter to be in the stand."

Womack's hunting lease contains some 3,200 acres, 2,600 of which are prime hardwood bottomland habitat, much the same as can be found on Red River and Three Rivers WMAs. These two WMAs are located adjacent to each other on the banks of the Mississippi River on La. Highway 15. These two choice habitat areas for whitetails combine for some 62,000 acres of whitetail paradise.

Womack concedes that the male whitetail will also be somewhat easier to pattern, especially since the deer become more diurnal in their movements.

"I tend to concentrate on hunting rubs and scrapelines at this time of the year," reports Womack. "Rubs are associated with bucks and the scrapes will be checked by both bucks and does."

For the novice, 'rubs' can be defined as the visible effects of the whitetail bucks actually forcing their antlers onto a sapling and literally rubbing them in all directions, either for removing the velvet in the early season, and/or as a territorial signpost to warn other bucks of their presence in specific areas.

Photo by LDWF

*Bowhunters are a privileged lot. In the late season, bowhunters can easily view the habits and rituals of their quarry.*

Scrapes are locations on the ground where bucks have 'hooved' out an area, usually under an overhanging limb. Bucks urinate in these small areas depositing pheromones (glandular chemicals) in an effort to attract a receptive female and to signal other bucks of their territory. Does will check these scrapes and also urinate to alert a buck that they're ready to mate.

According to Womack, stands placed near these rubs and/or scrapelines can be an effective strategy for the harvest of a whitetail. The idea is to place stands facing the wind and facing into the area where whitetails visit. Patience is the key since these scrapes and/or rubs may indeed be worked by whitetails at night, yet the lack of hunting pressure in the late season may allow these animals to become more diurnal in their approaches to these areas.

The use of grunt calls can also be effective at this time of the year. Whitetail bucks chasing does are known to emit a deep guttural "griiiick" noise and sometimes hunters who have never heard these before confuse this sound with those made by hogs. Grunt calls can be obtained in most retail outlets where hunting supplies are sold and cassettes and videos directing their use are also available.

The new rave over the utilization of deer decoys has hit the Bayou State and bowhunters are using these as effective devices for distracting whitetails' attention from the bowhunter. The author has successfully used these in the early season and several does were definitely distracted by the decoy. In fact, one such doe was so engaged in observing the decoy that the animal actually came within an arrow's length of the author as he

Photo by LDWF

**Bow and arrow hunting requires a special skill. Archery trophies represent prize-winning performances. Below, whitetail taken by a bowhunter.**

Photo by LDWF

sat on a fallen tree trunk. The use of "doe'n'heat" scents combined with decoys should also be effective during the late season.

Regarding public lands, Three Rivers and Red River WMAs are indeed a bowhunter's nirvana for finding huntable whitetails in January. One good piece of advice is to walk well into the woods, since many hunters in this area are observed to only hunt the fringes.

These areas offer very primitive campsites for the hunter, but if you like tenting you'll definitely be comfortable.

Another bowhunting favorite in St. Landry Parish is Thistlethwaite WMA, located a few miles north of Washington on La. Hwy. 10. In the last few years, this WMA has yielded two Pope & Young (archery) trophies that are listed in the Louisiana Big Game Records. Both were taken in the late part of the deer season. Also, a Boone & Crockett buck was harvested here in 1975 and is now listed as the Bayou State's No. 5 typical buck taken by gun.

Most recently, the LDWF management regime for Thistlethwaite has consisted of a rather limited gun hunting season including two either-sex, lottery gun hunts. This LDWF project is designed to allow for the recruitment of more 1-1/2 year old bucks into the older buck segment of the deer herd. Since the initiation of this project, average body weights have improved drastically into the 220 pound range (average) for the 2-1/2 and older buck segment.

Strategies used to score by bow on these whitetails include scouting for scrapes and rubs and literally waiting these animals out. The bowhunting pressure here is quite high in the late season and the use of grunt calls has not been as effective as on other WMAs. However, the use of scents and mock scrapes (made by hunters and saturated with doe'n'heat) are known to lure some bruisers into the vicinity of the hunter.

One disadvantage here is that Thistlethwaite WMA offers no campsites for the visiting hunter. There are a few hotels in the Opelousas vicinity that will accommodate sportsmen.

For more information regarding Red River and Three Rivers WMAs, write or call the LDWF, P.O. Box 426, Ferriday, Louisiana 71334, (318)757-4571. For more information on Thistlethwaite WMA, write or call LDWF, District VI, 105 Avenue of the Acadians, Opelousas, Louisiana 70571-0585, (318)948-0255. ■

# Sweet Water Geese on the Return

STORY & PHOTOGRAPHY BY CARLE E. DUNN

*This year's experimental season will be the third in a series. There's a probability that there will be a regular Canada season in the future. This photo captures goose decoys, shotguns, hunter's boots and bootjack to help remove boots.*

Shooting a goose approaching a decoy spread is deceptive on a first-time, goose hunt. The tendency is to fire too soon. These big birds look like Boeing 747s gliding to land. The impression, because of their size, is that they are closer than they are. "Wait," Sammie Faulk says, "don't shoot. They're not ducks. Their size fools you. Geese are big birds." This is the first lesson I learned about bagging Sweet Water geese.

Faulk, a duck and goose guide, sat next to me in an excellent blind. He held a 10-gauge, shotgun loaded with 3.5-inch, high brass shells. My 12-gauge was no match for Faulk's portable artillery. When he said wait, I waited.

Having never hunted geese, I contacted him at Cameron Wildlife in Lake Charles. I learned of the company from a friend who recommended him. He told me that he was an excellent tour, fishing and hunting guide. In particular, he was noted for his goose hunting prowess.

Having graduated from Grand Lake High School in Cameron Parish,

*Shrouded in the morning fog, Sammy Faulk places his decoys as the sun creeps above the horizon. Jester, his retriever, seems to supervise.*

Faulk spent his youth and adulthood tasting the locale's outdoor bounty. "I lived in the middle of an agricultural area," he said. "My high school friends and I had ample opportunities to hunt waterfowl in their parent's rice fields."

Furthermore, he had a deep, family heritage of hunting waterfowl. He explained that his grandfather, father, and many uncles lived in the area and they spent their lives hunting. "I grew up learning from these outdoorsmen about how to hunt. It was their way of life during winter months," He said.

In 1964, he attended college. He scheduled his classes in the afternoon. This way he could hunt every morning during the season. "There was always a need for hunting guides. Back then, the season was 55 days. I didn't miss a day. The money helped with school," he stated.

He explained that the major hunting quarry in his area is migratory game birds. "We hunt some doves, a few rails and woodcock. When we talk about hunting here, it's ducks first and then geese," Faulk stated. Yet, he noted a change taking place. "Of course with our short season and low bag limit," he said, "duck hunting is slipping away to goose hunting." Our trip the next day was to reveal what he meant by "slipping away."

Visibility was no more than a few feet. Dense fog shrouded his truck as we crept westward toward his hunting site near Sweetlake. "We're going to be late," he said. "You might know that on the season's last day there would be fog. If this stuff hangs in here, it's going to be tough seeing birds." This was an understatement for we could barely see the road.

After what seemed a eternity, he stopped. There was a dim glow in the east. While grabbing a bag of decoys, he released his retriever, Jester, from his kennel. "Hurry, follow me and watch your step. This field is muddy," he advised. He and Jester began to disappear into the misty glow. I plunged after their dim outlines.

"Here it is," he said, "stay here while I set the decoys." Jester followed as if to supervise while Faulk placed inducements for our feathered prey. From inside the blind, I could hear geese overhead, but they were invisible in the fog. The sun crept over the horizon with a ghostly glow and Faulk started to return and then stopped.

With his face to the sky, he cupped his hands around his mouth and began calling geese. From my position, I saw a large, specter-like bird descend from the mists. Faulk fired and missed. The bird continued in my direction and I fired. The result--rattling shot bouncing from the bird as it disappeared. Yes, they look like giant airliners and I shot too early. This took some gall on my part. If an expert with antiaircraft piece didn't bring it down, who was I to think I could?

Faulk and Jester, now in the blind, worked hard. He would call birds and identify to me those that were legal to shoot. Jester would leap from our position and diligently return with downed birds. Soon, the sun was high and the fog gone.

Next, the Canadas appeared. They came from every direction over the blind--thousands of them. It was almost as if I could reach and touch them. Yet, I could not shoot for there was a special season and this day wasn't part of it.

From behind a nearby levee, there was incessant cackling. Faulk said, "Leave your gun. I will show you something." I followed and climbed the steep embankment. At the top, a vista of Canada geese spread across a large field. Their noise was deafening as they

waddled through the mud. Upon our approach, they lifted into the sky and filled it with cackling birds that almost blocked the sun as the fog had. It was a magnificent sight.

Later, with gear loaded and Jester in his kennel, he took me on a tour. As we drove the roads, I saw field after field covered with Canada geese. Moreover, many would let me approach and not fly. The other species were not so kind. Stop the truck and the speckle bellies, snow geese and eagle heads were soon airborne. It was as if the Canadas knew they were safe. With so many birds, why was there such a restriction on hunting them? A later phone call to Robert Helm, of Louisiana's Department of Wildlife and Fisheries (LDWF), brought interesting answers.

Helm is the Waterfowl Study Leader for LDWF. His experience is extensive with almost 13 years on the job. Moreover, he holds a masters degree in wildlife management from Louisiana State University. He conducts waterfowl surveys and coordinates with 14 states in the Mississippi Flyway. Helm also does research on private lands and refuges to decide how to improve waterfowl habitat.

According to Helm, the closed season on Canadas was a necessity because of their decline over the years. He said that from 1938 through 1942 the five-year average of Canadas migrating to southwest Louisiana was 62,000. Yet, from 1953 to 1957, only 8,000 came to the prairies. "The last full season was in 1961," he said, "we had to shut down the season to encourage these birds to winter in our area." Unfortunately this didn't work. During the 70s, the average fell to 1,000 geese. Why?

"There was much speculation during the '60s," Helm said. One noted cause was that Canadas began stopping in states farther north, primarily Missouri. Land in these areas was being changed to agricultural use and the birds did not continue south. Timber lands were converted to raising corn and mild winters provided ice free territory for the birds. Speculation involved overshooting. However, this did not seem to be the cause. It was a change in migration patterns. Yet, there were future changes for the better.

In the early '80s, Canadas began appearing in rice fields with speckle bellies. Helm related that aerial surveys along migration routes made it extremely difficult to separate white fronts from Canadas. The decision was made to use ground surveys. In 1985, LDWF established six survey crews. These teams conducted from three to six surveys each winter since then. This effort concentrated on the rice belt in southwest Louisiana.

Helm said, "Conducting surveys from roads can only provide a relative idea of how many Canadas are present. An old, unmaintained levee can easily hide 1,000 geese. We're only seeing a certain portion of these geese from the road. However, in 1989, we counted 23,000. We felt that the average in Louisiana was around 30,000 birds." While these numbers were a dramatic increase from past scarcity, there was another difference.

"The bird we have now," Helm related, "is a different bird than we traditionally had back in the early 1900s." According to the waterfowl expert, today's Canadas are smaller and frequently called Lesser Canadas. These birds weigh from four to five and one-half pounds. In 1989, a request was made to begin an experimental season for hunting the renewed population.

Nine-day seasons were held in 1990 and 1991 by special permit. Hunters completed questionnaires as to days hunted and birds bagged. There will be a third and final experimental season this year. It extends from January 20 through January 28, 1993. There is a special permit fee of $5 and the hunt area is limited to a portion of southwest Louisiana as described in the 1992-93 Louisiana Migratory Game Bird Regulations pamphlet. Hunters can obtain permits by mail, or in person, at LDWF offices in Lake Charles, Opelousas and Baton Rouge. The daily bag limit of Canada geese and White Fronted geese is two; no more than one may be a Canada goose.

According to Helm, there may be a regular Canada season in Louisiana's future. Hunting impact upon the population has been small considering the number of hunter days.

As Sammie Faulk told me, "Wait." You too could have an airliner in your sights, but it will be a Canada. ■

**During a hunt, the retrievers work as hard as the hunters when recovering the downed birds.**

# Dragonflies of the Cajun Prairie

STORY AND PHOTOGRAPHY
BY DR. MALCOLM F. VIDRINE & DR. CHARLES M. ALLEN

*An estimated report states that Louisiana has about 86 different kinds of dragonflies. Early dragonflies were giants with wingspans exceeding 24 inches. They date back approximately 300 million years.*

Dragonflies are among the most ancient of flying insects, with fossil specimens as old as 300 million years. Some of the early dragonflies were giants with wingspans exceeding 24 inches. Modern dragonflies have wingspans of less than five inches but are no less spectacular in form. Dragonflies have a tremendous number of common names, which vary greatly from one region to another; thus, the use of scientific names is extremely important even in general discussions. Both common names and scientific names are provided with the photographs.

The Order Odonata includes two major kinds of insects: dragonflies and damselflies. Dragonflies and damselflies are very similar when in flight but can usually be distinguished while perched. Dragonflies generally keep their wings spread out to their sides while damselflies fold their wings up over their back when perched on an object. George H.

Bick, in his 1957 paper entitled *The Odonata of Louisiana*, reported 68 kinds of dragonflies and 33 kinds of damselflies in the state. James Barr lists 76 dragonflies from Louisiana in his 1979 paper. Recent works report additional dragonflies and we estimate that there are more than 86 kinds of dragonflies in the state. The best known book on North American Odonata is *A Manual of the Dragonflies of North America* by James G. Needham and Minter J. Westfall (1954). The Cajun Prairie ecosystem (region containing both the prairie and its associated gallery forests) contains at least 45 kinds of dragonflies and 15 kinds of damselflies. This area provides an excellent opportunity to view many kinds of dragonflies in large numbers.

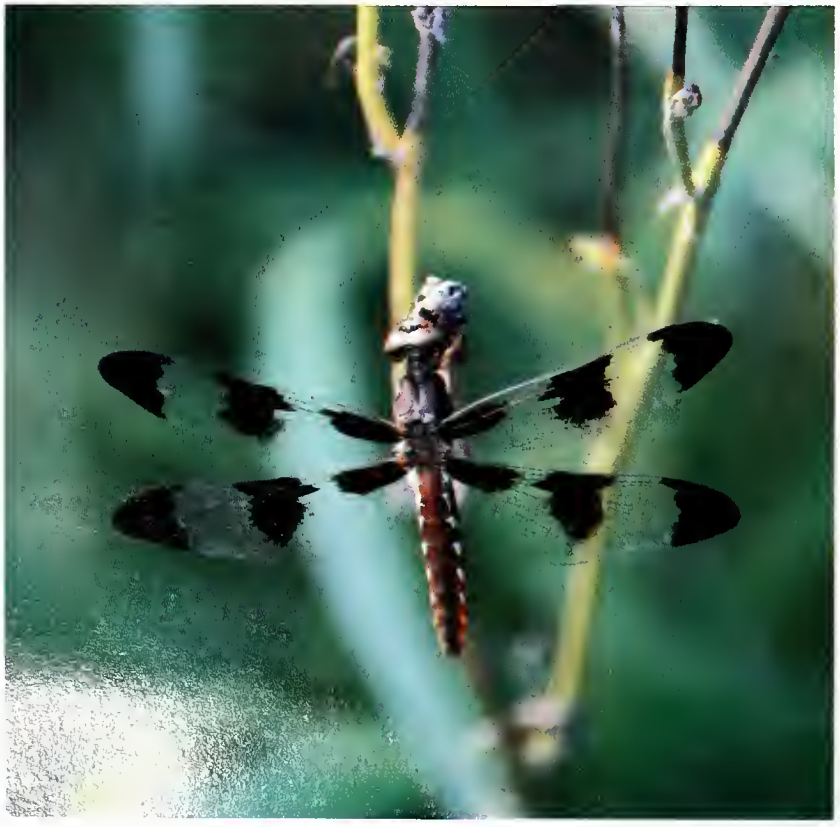
Dragonflies illustrate a number of major biological phenomena. One of the most important of these is metamorphosis. During a single dragonfly's life, it undergoes three distinctive stages of appearance, with each stage having equal importance in its survival. Life begins as an egg, which hatches into an aquatic larva (nymph). The nymph is generally an animal-eating machine, which eats constantly. It is generally non-molting, remaining similar in appearance until the final molt into the flying adult. Each stage has a specific role and has different ecological requirements. The nymphal stage and adult stage are heralded for the large numbers of mosquitoes which they eat (thus often leading to the name "mosquitohawks"). The adults eat a variety of flying insects, usually what is most abundant. Both nymphal and adult dragonflies have large, multifaceted, compound eyes capable of detecting the slightest movement in their field of vision.

Mating adult pairs fly "in tandem" as a couple with the male grasping the female behind the head using claspers at the tip of his tail. When the pair alight on an object, they curl their bodies to form a characteristic "ring" formation, which is unique not only among insects, but in the animal world.

Among the truly amazing observations that can be made on dragonflies are the color differences. These add great beauty to the group but cause tremendous difficulty at times in identifying which dragonfly you are observing. Teneral (newly emerged) adults have a particular color pattern, which may change slowly over several days in the mature adult pattern. In many cases, especially the skimmers, males and females bear different colors. For example, the green clearwing female is green, while the male is blue; the amberwing male is yellow, while the female is distinctly black with dark spots in the wings; the whitetail male has a distinctive white tail and a single dark band in each wing, while the female has a dark tail and two distinctive dark spots on the wings; the common green darner female is green, but the male has a porcelain blue tail; and the blue dasher female is black with yellow dashes, while the male is distinctly blue. In many other cases, there is a notable, but less obvious,difference between the sexes, e.g. in the pennants, the males are spotted in red, while the females are spotted in yellow. Dragonflies live a month or more, and each day during their early adulthood color patterns deepen, but as age creeps along, colors begin to fade. Thus, it is commonly said that a dragonfly is not the same color from day to day. Some kinds of dragonflies exhibit a polymorphism, i.e. there are several kinds of color patterns regardless of sex or age. The prince baskettail usually has three distinctive spots in each wing, however, these spots vary

*In skimmers, males and females bear different colors. Observe the great blue skimmer (Libellula vibrans) as shown here perched on a branch.*

**Dragonflies can be grouped into five types: clubtails, darners, cruisers, emeralds and skimmers. Above is the red-mantled glider (*Tramea onusta*). Featured below is a female whitetail (*Libellula lydia*).**



from very small to very large. The most striking polymorphic species is the seaside dragonlet, a common species that may number in the hundreds in a few square yards in western Louisiana salt marshes. We have counted as many as six obvious color patterns in the body and wings in a single population. A final example of color variation is seasonal variation, which is most obvious in the variegated meadowfly. Spring teneral specimens are gold in color, but autumn teneral specimens are red.

Dragonflies in general display protective coloration; i.e., they are colored in what appears to be brilliant patterns, but in their habitat these patterns make them very difficult to find. They may perch a few feet from an observer and yet be almost impossible to locate.

We studied remnant strips of Cajun Prairie along railroad right-of-ways and associated habitats in southwestern Louisiana for three years. Adult dragonflies were identified and counted as we walked five miles of remnant strips twice a month. Similar studies were undertaken in nearby gallery forests, flat pinelands, bottomland hardwood forests, upland forests, and marshes. From these studies, insight into the varied kinds of dragonflies, their flight seasons and their numbers were noted. The vast amount of data also provided for good insight into specific flight patterns and territorial preferences for each kind of dragonfly. Dragonflies were able to partition the habitat into separate territories for perching and for feeding. As the seasons changed, different dragonflies invaded available territories created by the disappearance of their predecessors.

Dragonflies on the cajun prairie can be grouped into five groups: clubtails,darners, cruisers,emeralds, and skimmers. In the western Louisiana bogs and forests, two additional groups of dragonflies, petaltails and spiketails, are also found. The smaller damselflies are common on the prairie, but our discussion will be limited to the larger dragonflies.

Of the dragonflies, two groups are exceedingly common on the prairie, darners (mainly the common green darner) and skimmers (the most modern dragonflies with numerous kinds). Most clubtails, cruisers and emeralds are occasionally seen on the prairie, and the prairie forceptail, a unique clubtail, is apparently restricted to the prairies and adjacent

gallery forests of Texas and Louisiana.

March and April are noted for rather unusual kinds of dragonflies. Variegated meadowflies are the first dragonflies to be seen. Common baskettails and corporal skimmers and several kinds of clubtails make up the major kinds of dragonflies. The common green darner, which we've seen every month of the year, appears in small swarms. Many kinds of skimmers can be seen flying in late April, but their numbers are usually small.

May and June are characterized by a significant increase in dragonflies. The most common of the prairie dragonflies, the holloween pennant, appears and remains abundant all through summer. Blue dashers (also called blue pirates), green clearwings, amberwings and whitetails become numerous, while the early dragonflies of March and April disappear. The prairie forceptail also appears occasionally, but large populations can be found along the bayous. Swarms of the spot-wing glider can often be seen circling five to 20 feet overhead. Needham's skimmers and golden-winged skimmers are locally abundant. Swamp darners, regal darners, Georgia river cruisers and royal river cruisers are among the largest North American dragonflies and can be seen occasionally on the prairie.

During July and August, the largest populations of dragonflies appear. Swarms of the globetrotter join the spot-wing glider and then replace it. Often common green darners, swamp darners, and gliders join, which can number in excess of 200 individuals. The roseate skimmer and the greater hyacinth glider appear; both become numerous in the next two months. Along bayous and near ponds, slaty skimmers, great blue skimmers and four-spotted pennants are abundant.

In September and October, many kinds of skimmers, which have been common all summer, gradually disappear as day length shortens and nighttime temperatures drop, while the variegated meadowfly reappears. Tremendous swarms of gliders, common green darners and globetrotters are common morning and afternoon.

November through February bring the cold of winter, and all dragonflies decline rapidly in numbers. The absence of flying insects in general reduces the available food for any remaining dragonflies. Some adults overwinter while hiding in protected sites, and they can be seen when a warm afternoon provides an opportunity for food.

Very few books on dragonflies are available for the general reader. Dragonflies are relatively easy to collect, but colors tend to fade rapidly following death. The beautiful color patterns in the wings of the dragonflies, however, do tend to hold color.

The camera is the tool of choice, since many dragonflies tend to fly the same routes and use the same perches day after day. Photographs usually provide sufficient information to permit species determination. Detailed notes on the kinds of dragonflies seen provides a good insight into the variety of insect life in a specific area. An aerial insect net can be used to capture dragonflies and make close examinations of their various structures.

A natural area will have a great number of different dragonflies, and some of these have very large populations. However, the community is ever-changing, and each month the kinds and numbers of each will be different. The extent of diversity and abundance is determined by the health of the nearby watery (aquatic) habitats where the nymphs grow and the terrestrial habitat where the adults perch, fly and feed. Changes in water quality or land cover will severely alter the dragonfly community. Invisible agents can also greatly modify the community structure. A good example is biological magnification. Both nymph and adult dragonflies have voracious appetites (including other dragonflies, mosquitoes, love bugs, etc.). Insect prey may each contain small amounts of an insecticide, but the predator dragonfly will accumulate these small amounts as it eats. The magnification of the impact upon the predator may well result in death. Thus a biological magnification of poisons in the environment would directly impact the dragonfly community.

Dragonfly communities are excellent for study. Many are territorial and tend to stay in one area. There are many species in a community, and many of the species will have large populations. Many of the species are readily recognizable and the sexes can be determined as they are commonly color-coded. By monitoring the changes in a community, the health of a particular habitat can be monitored.

Dragonflies are integral parts of nature's complex community. They provide valuable assistance in controlling pest insects, and provide beauty and striking aerial displays over a peaceful outdoor landscape. Protecting dragonflies is dependent upon preserving natural areas. ■

***Photographing dragonflies can be successfully done with some preplanning. Many dragonflies fly the same route each day, using the same perch. Therefore, a steady camera in the right place could produce beautiful color photographs.***

# *Louisiana's* BOUNTY FROM THE GULF

BY KARL TURNER AND DOROTHY TRICK

When the warm saltwater breezes from the Gulf of Mexico drift across the shores of Louisiana at sunrise, dozens of fishermen cast their nets into the rich, tempestuous waters. Adjacent estuaries, lakes and bayous are fertile breeding grounds for oysters, crawfish and crabs. Harvesting the bounty from these waters, dedicated fishermen are counting on the "catch of the day" to be tomorrow's filet.

Although the average seafood consumer may not realize it, today's fresh "catch of the day" from Louisiana could be only hours away from America's restaurants and home kitchens.

Louisiana ranks as the number one producer in the nation of shrimp, blue crab,

oysters, crawfish, tuna, red snapper, wild catfish, black drum, sea trout and mullet. Because of its reputation for this diverse abundance, many people think of Louisiana whenever the word seafood is mentioned.

Advances in processing, inspection, wholesaling, distribution and transportation have made it possible for fresh Louisiana seafood to be served and consumed within hours of its catch. Demand for fresh, quality seafood is high from chefs, restaurateurs and individual consumers in search of nutritious and flavorful center-of-the plate meat alternatives. Louisiana is committed to meet this increasing demand.

Photo courtesy of LSPMB

*Louisiana waters provide fishermen with a year-round supply of a variety of fish species. Here, a fisherman works a hoop net on a Louisiana lake.*

With a production of 1.1 billion pounds of fishery products in 1990, the Louisiana seafood industry accounted for 15 percent of the nation's seafood harvest. Combined harvests of Louisiana's commercial and farm-raised products, including those generated by the state's rapidly expanding alligator industry, exceeded $276 million in 1990.

Because of overfished waters during recent years, many of the state's processors and wholesalers are diversifying their product lines. The variety of species harvested in Louisiana waters assures fishermen of a year-round supply, and by substituting one fish for another in traditional recipes consumers are discovering many of the so-called "underutilized" species.

The Louisiana shrimp industry, dating back well before the turn of the century, is now recognized as the state's largest fishery. A fleet of nearly 20,000 boats harvests 40 to 50 percent of the shrimp from the gulf, and ranks Louisiana at the top of U.S. shrimp poundage.

Current concerns about the safety of seafood have many consumers taking a closer look at the point of purchase. Seafood specialists at the Louisiana Seafood Promotion and Marketing Board recommend that consumers purchase seafood with a fresh "sea" smell, firm-textured flesh, and only from a reputable, established retailer.

## FACTS AND FIGURES ON LOUISIANA SEAFOOD

Louisiana is the second largest seafood producing state, with 1.1 billion pounds landed in 1990. The Louisiana seafood industry, which has an economic impact of $2 billion to the state, employs 55,000 people in its related harvesting, processing, wholesaling and distribution enterprises.

More than 100 commercially valuable seafood species swim the warm waters of the Gulf of Mexico and the adjacent estuaries of Louisiana, a variety unmatched by any other state in the nation. Diversification of product lines and substitution of "underutilized" species for traditional favorites is helping to ensure that Louisiana waters will continue to provide seafood products for generations to come.

Dollar values are determined by dockside value; as seafood travels through the distribution chain, it becomes more valuable and more important to total economic impact.

Louisiana leads the nation in the production of shrimp, blue crab, oysters, crawfish, tuna, red snapper, wild catfish, black drum, sea trout and mullet. The value of the 1990 seafood industry exceeded $276 million with the following individual species generating their own significant shares:

| | | |
|---|---|---|
| Shrimp | 119.0 million lbs. | / $153.0 million |
| Crawfish | 7.4 million lbs. | / $ 3.9 million |
| Oysters | 8.0 million lbs. | / $30.0 million |
| Tuna | 5.9 million lbs. | / $14.2 million |
| Blue Crab | 39.0 million lbs. | / $15.4 million |
| Red Snapper | 1.2 million lbs. | / $ 3.0 million |
| Wild Catfish | 3.6 million lbs. | / $ 2.3 million |
| Mullet | 2.6 million lbs. | / $ 2.0 million |
| Black Drum | 2.8 million lbs. | / $ 1.0 million |
| Sea Trout | 763.0 thousand lbs. | / $1.1 million |

Louisiana is ranked second in the nation in the landings of swordfish, shark and grouper,

Photo courtesy of LSPMB

three popular species nationwide.

A rapidly expanding aquaculture industry is helping to keep pace with the demand for crawfish, catfish and alligator. In 1990, there were more than 3,000 aquaculture producers in the state. Many specialists claim the aquaculture industry will supply much of the seafood needs of future decades.

Because of its many nutritional benefits, fish and seafood are much sought after commodities. Chefs, restaurateurs and seafood retailers from coast to coast report a significant demand for fresh, quality seafood. Louisiana is responding to this increased demand with innovative promotions and creative marketing of its diverse seafood products.

Seafood adapts to today's diets. Baking, broiling, grilling, poaching, microwaving and pan sauteing are simple but healthful preparation techniques.

For more information about seafood, write to the Louisiana Seafood Promotion and Marketing Board, P.O. Box 70648, New Orleans, Louisiana 70172-0648.

## BUY SELECTIVELY

Seafood specialist contend that selecting fresh seafood isn't as difficult as many consumers think. Knowing how to purchase fresh seafood and knowing that the quality of the purchase meets your expectations is quite important. By exercising a little knowledge at the point of purchase, average consumers can be confident the seafood they are selecting is a safe and high quality product.

Consumers are cautioned about separating facts from claims that certain seafood is unsafe. Officials of the Seafood Promotion and Marketing Board explain that selecting fresh seafood should not be challenging to the consumer. They say start by purchasing from a reputable retail establishment. Then rely on the nose. The nose knows. By smelling the product prior to purchase, making a fresh choice is easier. Fresh seafood should have a good, sea water smell; not a heavy or foul fish odor. When choosing fresh whole fish, experts say, the fish should exhibit bright clear eyes, blood red gills and firm flesh which springs back when touched. A good quality filet should also have a firm flesh.

The same characteristics apply when purchasing shrimp. The head should be clear, the shrimp should be firm and the smell should be fresh.

Time and temperature abuse is the number one reason for the spoilage of seafood. Keeping seafood stored in an ice bath or at the right temperature will prevent harmful bacteria from spoiling seafood before it can be used. When purchasing seafood at the supermarket seafood experts recommend selecting it last, and urge consumers to go directly home immediately after purchase.

While frozen seafood has come to mean the opposite of fresh and shouldn't be marketed as fresh, much of the fresh frozen seafood products are actually of higher quality than the fresh seafood sold in markets today. Frequently Individual Quick Frozen (IQF) products are caught, processed and frozen on the boat, creating a product that is sometimes considered better than fresh.

Louisiana seafood is safe. A network of agencies, including the FDA, the USDA and several at the state and local levels, ensure the safety of Louisiana seafood. For example, Louisiana's Department of Health and Hospitals monitors our waters for bacteria, through 8,000 water samples annually.

Seafood specialist also noted that a major effort is in progress to better coordinate state and federal programs to develop a mandatory seafood inspection program.

## A PRIMER ON SELECTING SEAFOOD

The Louisiana Seafood Promotion and Marketing Board suggests consumers shop wisely when purchasing fresh seafood. The following are a few of its recommendations:

* Always purchase seafood from an established, reputable dealer. The retailer is as much responsible for the quality and safety of seafood as any of its handlers.

* Fish should not be lying in water or juice, and seafood without the skin should not have direct contact with the ice.

* Oysters in the shell should present tightly closed shells. If the shells gape slightly, when they are gently tapped, they should close. Discard any that do not. Shucked oysters should have plump, creamy-white meat. They should be surrounded by a clear and slightly opalescent liquid, with a mild odor.

* Live crabs and crawfish, when properly refrigerated, should not be very active, but should move slightly. Cooked crabs and crawfish should have a hard shell, and be bright red or orange in color. Cooked crawfish should have curled tails. Those with straight tails were not alive when they were cooked, and should be discarded.

When buying frozen fish and shellfish, examine the package for freezer burns, ice crystals and discoloration. The package should be stored below the load limit of the freezer case and should still have its original shape with wrapping intact. There should be no visible signs of melting and refreezing.

Once purchased, seafood should be properly stored as soon as possible. Avoid delay in freezing or cooking. Remember, all foods contain bacteria, and changing temperatures provide breeding grounds for bacteria. It is important that seafood be kept at a constant low temperature. Freeze fast, freeze solid, freeze airtight and freeze fresh!

## THE BIG PICTURE

On a national scale, 1989 figures (the latest available) show Louisiana trailed only Alaska in total poundage of commercial seafood produced. In terms of value of output, equal to almost $265 million and eight percent of the nation's total, Louisiana trailed only Alaska and, by a very small margin, Massachusetts. Four of Louisiana's seafood ports ranked among the nation's top ten in total poundage of landings.

The importance of the commercial seafood industry to Louisiana's economy can be assessed by comparing the value of its output to the value of other animal commodities produced in the state.

In 1989, the value of all animal commodities produced in Louisiana was estimated at $1.1 billion before processing. This includes milk, beef, poultry, pork and all other animal products.

The state's harvest of marine (saltwater) fish alone accounts for one-fourth of that amount and the combination of marine fish and freshwater fish (largely farm-raised) accounts for one-third of the total.

For information on Louisiana seafood and how to select, prepare and cook, contact the Louisiana Seafood Promotion and Marketing Board, P.O. Box 70648, New Orleans, Louisiana, 70172-0648, (504) 568-5693. ■

*Photo courtesy of LSPMB*

**Karl Turner, Executive Director, La. Seafood Promotion/Marketing Board (left), Executive Chef, Century Plaza Hotel of Los Angeles (center), and famous Lafitte Landing Restaurant Chef John Folse (right) present some Louisiana pride, crawfish.**

# Manchac Wildlife Management Area Profile

BY DAVID JOHN

Photo by LDWF

Manchac Wildlife Management Area is located in the upper northeast corner of St. John the Baptist Parish. It is about 40 highway miles northeast of New Orleans, 14 miles north east of Laplace and some 11 miles south southeast of Ponchatoula.

In 1975, the Louisiana Department of Wildlife and Fisheries purchased 5,261 acres of the marshland habitat from E. G. Schleider. In 1977, 3,064 adjacent acres were added to make the total 8,235 acres.

The type of habitat that one sees on Manchac today is mostly an open bulltongue marsh with a few trees scattered about. This is vastly different from the early 1800's when Manchac was so heavy with merchantable cypress trees that there was very little space for actual marshland. In those days there was a virtual sea of trees along the entire peninsula. A brief look at the area's history will give some understanding of the elements that led to the drastic habitat change.

It is likely that the swamp was first settled by the Muskhogean Indians between 500 and 1000 BC, and then later by the Tchefuncte Indians. Since the Indians relied mostly upon fishing, hunting and trapping, the ancient cypress swamps unquestionably felt little or no effect from their presence.

However, the Europeans who began arriving in the 1700s, were more concerned with business and agriculture than with a primitive life style. Hard looks were turned towards the trees and how to use them. Logging methods were developed which required clearing float roads through the swamp at the time of tree girdling to enable transport of floating logs to land. Manpower, mules and oxen then pulled the timber sections to the mill. The old methods were crude and inefficient and did not leave much permanent, physical damage in the swamp but all that was about to change.

In the late 1880s, a number of developments began to throw shadows over the great trees. Commercial logging methods were being improved and railroads were being rapidly expanded. Trees cut in Louisiana could be shipped throughout the country, providing lumber for construction in areas that had been previously logged out. And so, in the 1890s, logging of Manchac and other cypress swamps of Louisiana started on a scale that was destined to drastically change the physical appearance of the area. Different methods were employed depending on the land type and on Manchac the method of choice was pullboat logging.

This method depended upon digging a main canal and a collection site at the end with numerous ditches running into the woods in a radial pattern. Boats were used to pull the cut trees toward the ditches and finally into the main canal. The scars from these operations remain to this day in the form of wagon wheels still highly visible from the air.

This was the beginning of real trouble for the cypress trees because serious habitat

# Exploring Louisiana

Published by the Louisiana Department of Wildlife and Fisheries, Information and Education Division

Issue 1

**Nutria**, bobcat, coyote, gray fox, mink, muskrat, opossum, otter, red fox, raccoon, and skunk are animals known as FURBEARERS. All of these animals can be found in Louisiana's many wooded areas and coastal marshes.

Furbearers of Louisiana are important since they inhabit the land, and because they have been an important economic resource to Louisiana citizens for a long time. The pelts (fur or skin) of these resident fur animals are a source of income when the skins are bought and sold. Most pelts are used for coats, jackets, and hats. Some of these furbearers are trapped for their meat.

Hunting, trapping and trading have been important to the people of America since the discovery of the new world. The history of wild fur production dates back to the 1700's and the founding of New Orleans. The mighty Mississippi River reached into the center of America, and fur could be collected and transported along this great water system. In New Orleans, the fur could be shipped to markets all over the world. During the 1800's trapping in Louisiana became very popular, particularly with muskrat, mink, raccoon, otter and opossum. By the early 1900's the Louisiana fur industry involved many, many people---- trappers, buyers and dealers.

Today, there are strict laws that govern the trapping, buying and selling of animals classified as furbearers.The Louisiana Department of Wildlife and Fisheries is responsible for the regulations and the setting of the trapping season so that fur animals of Louisiana are properly harvested (taken). The professionals and biologists of this department are concerned with the fur resources lasting an indefinitely long time. In Louisiana there are very few people whose lives are not touched by wildlife and fish resources.

**FACT:** Louisiana is the number one wild fur producing state in the United States.

## Alligator in Louisiana

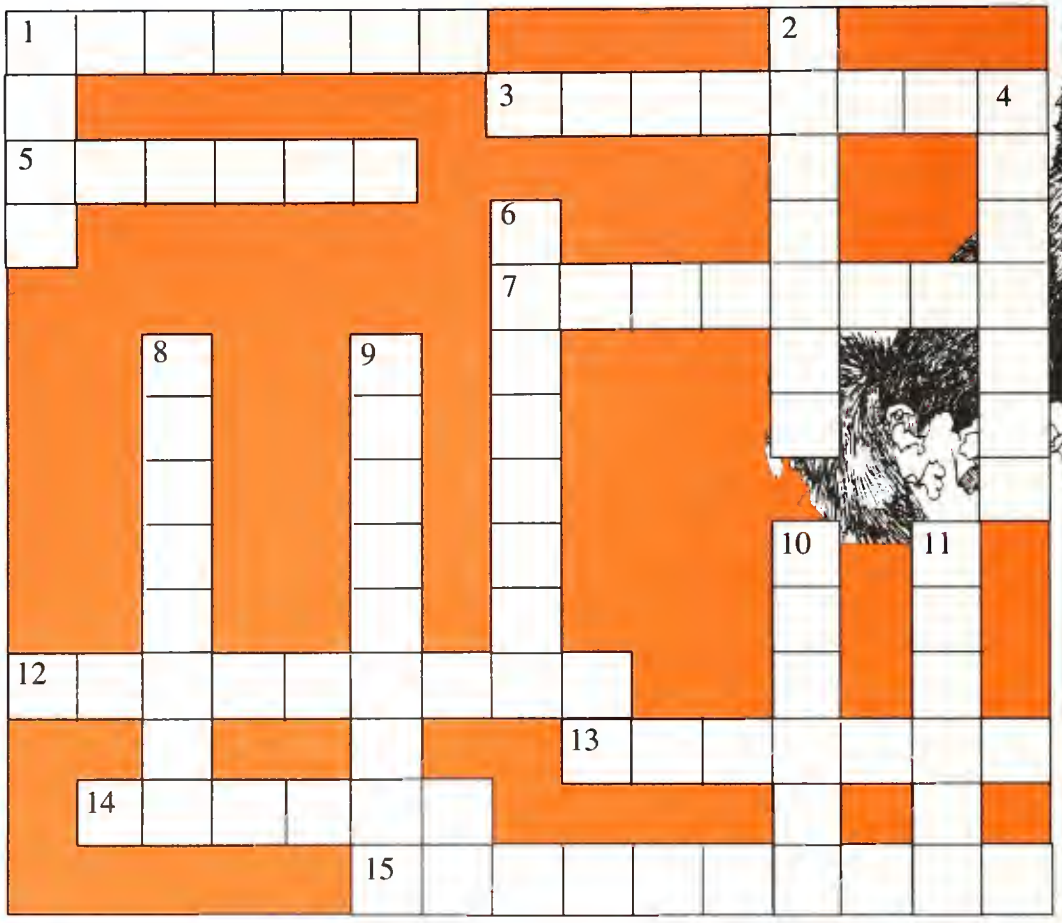
The alligator, although not a fur animal, has close ties to the fur industry in Louisiana. Alligator hides produce beautiful durable leather goods such as belts, wallets, purses, boots, shoes and luggage. Alligator meat is consumable.

It belongs to the group of animals called reptiles. They are cold-blooded and need a special environment to regulate their body temperature. The alligator is an egg laying reptile, and the young hatch after a period of incubation. Alligators are present in all river systems and swamps in Louisiana. The greatest concentration of the American alligator (it's common name) occurs in the millions of acres of coastal marshes.

The alligator is not an endangered species and hunting is strictly controlled.

**FACT**: In 1991, state records show that 25,000 alligators were harvested at a value of $5.6 million for the skins and another $3 million for the meat.

(more on page 4)



# *Creature Crossword*

*Test your knowledge by completing this crossword puzzle.*

ACROSS

1) Small rodent that is very abundant in coastal marshes

3) First industry in the Louisiana territory

5) Number one furbearer in Louisiana

7) Production and sale of goods and services

12) An animal that is trapped and its pelt sold

13) Primary carrier of rabies in Louisiana

14) The fox found around open areas

15) Largest of the three furbearers trapped by the early trappers

DOWN

1) Small, weasel-like animal

2) The only pouched animal found in Louisiana

4) Only canine that climbs trees and is found in heavily wooded areas

6) Animals that are free to move about their habitat

8) Something found in the environment that has value

9) Reptile that is trapped in Louisiana

10) Only feline still found in Louisiana

11) Large canine that appeared in Louisiana after 1942

# *Wildlife Word Search*

| A | R | E | P | X | Q | Q | Y | V | R | N | G | J | F | R |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| D | E | A | R | N | N | O | O | C | C | A | R | K | G | D |
| K | D | T | I | U | T | C | B | O | B | C | A | T | R | N |
| J | F | M | V | L | U | A | Y | Z | V | R | Y | N | K | A |
| C | O | G | E | H | W | I | L | D | L | I | F | E | D | P |
| K | X | P | R | S | W | A | B | L | X | T | O | P | K | R |
| I | T | M | O | Q | U | V | O | R | I | N | X | J | M | E |
| N | M | Y | T | R | A | P | P | I | N | G | N | D | N | R |
| D | U | A | T | E | G | I | O | J | V | F | A | B | Y | A |
| U | K | T | E | K | O | S | S | T | P | K | L | T | J | E |
| S | Q | U | R | Y | C | D | S | Z | N | V | R | B | O | B |
| T | S | W | A | I | E | D | U | I | F | B | X | T | P | R |
| R | D | H | L | O | A | E | M | U | S | K | R | A | T | U |
| Y | K | R | E | S | O | U | R | C | E | W | T | W | H | F |

*Can you find the following words?*

| | | | |
|---|---|---|---|
| Furbearer | Alligator | Industry | Raccoon |
| Wildlife | Bobcat | Muskrat | Red Fox |
| Trapping | Gray Fox | Nutria | River Otter |
| Resource | Mink | Opossum | Pelt |

Your score: Thumbs up for successfully completing these activities!
Congratulations!

## Discovering Louisiana's Fur Animals

In the animal kingdom, animals with backbones are divided into groups. These are mammals, birds, fish, reptiles, and amphibians. Each group has its own distinct characteristics.

What is warm-blooded, has fur or hair, can breathe with lungs, gives birth to live young, and nurses their young with milk? MAMMALS, of course!

Look at the chart to see the different classes of furbearers:

| POUCHED | RODENT | FLESH-EATING |
|---|---|---|
| opossum | beaver | coyote |
| | nutria | red fox |
| | muskrat | gray fox |
| | | raccoon |
| | | mink |
| | | skunk |
| | | river otter |
| | | bobcat |

## Why Harvest our Wildlife?

Animals will die. There are two means by which this can happen. Either man will harvest and utilize the excess numbers of an animal population or nature will harvest them. Nature will reduce the excess population by disease, starvation, or other natural acts such as hurricanes. Sometimes overpopulation problems will cause habitat destruction by the animals.

To achieve a balance between man's harvesting and natural harvesting of our wildlife resources, regulations and management decisions are made by the Louisiana Department of Wildlife and Fisheries. Information is constantly gathered and analyzed to determine population trends and other important data concerning the land and the animal. Providing for a quality habitat and applying sound management practices ensures the future abundance of renewable resources of the state. Wildlife and Fisheries personnel strive to accomplish this as effectively as possible.

**FACT:** The nutria looks like a large brown rat, its long coarse guard hair is light brown covering a grayish underfur. The large webbed hind feet make the animal an excellent swimmer. It has 20 teeth with the four huge front teeth being reddish orange in color. Nutria can begin to reproduce at eight months of age and breed throughout the year. The female can nurse its young while swimming because the mammary glands are located along the sides of the back. The nutria has very versatile fur which can be plucked, clipped, dyed, sheared, or left natural.

**DID YOU KNOW?** The meanings of the following words. Look them up to get a clearer picture of what you have read. HABITAT, RESOURCE, BIOLOGIST, INDUSTRY, TRADE, RENEWABLE, CONSUMPTION, ENVIRONMENT.

**Suggested reading:
*Year on Muskrat Marsh* by Berniece Freschet (Scribner's, 1974)

### THE PELICAN'S POUCH

Brown Pelicans are our state bird. The pelican's bill is not used for holding fish, but for catching them, like a scoop-net. When the pelican plunges its bill into the water, the flexible lower jaw expands to a broad oval scooping fishes into its pouch.



This magazine supplement is a production of the Louisiana Department of Wildlife and Fisheries, Information and Education Division by Wayne Huston and Phyllis Darensbourg. Address inquires and comments to P. O. Box 98000, Baton Rouge, LA 70898.

changes were at hand that would make regeneration difficult. The excavated material from the canal construction affected drainage by impounding water on the up-slope side of the spoil. Further, the pulling of logs toward and along the canals to the collection site destroyed adjacent vegetation creating soft-bottomed swampland with lower elevations and increased periods of flooding. The last stands of virgin cypress were cut in the mid 1940s but the changes wrought by the timber cutting, in addition to other more recent environmental factors such as pollution, erosion, subsidence and increased salinity levels, have caused the natural reproduction of cypress to be adversely affected.

The logging operations stimulated the growth of such villages as Ruddock, Desair, Frenier, and Manchac which sprouted up along the railroad tracks in the early 1900s. These small towns provided water stops for the railroad but they also had schools, churches and stores. Residents worked at the logging operations, fished and hunted and grew food in gardens. In 1915, however, a devastating hurricane and tidal wave swallowed all the villages but Manchac. Thus, the things that brought people to this area, the water and the trees, subsequently destroyed many of them.

Nevertheless, Manchac survives to this day, with most of its residents still living close to the swamp in much the same manner as the Indians of two thousand years ago.

An interesting remnant of past times is the old lighthouse which can be seen at the east end of Pass Manchac. The current tower, constructed in 1866, is the fourth such structure built on the same spot to mark the entrance of the Pass. Also, the Turtle Cove camp, built in the early 1900s, can be seen on the south side of Pass Manchac about a mile and a half from Lake Pontchartrain. At present the camp and adjacent residence are being used as a headquarters for habitat research by Southeastern Louisiana University.

Today, Manchac WMA is a flat, low, easily flooded marshland, supporting stands of *Sagittaria* (bulltongue), smartweed, alligator weed and water hyacinth. Access is strictly by boat. Although not as deep as they once were, the "wagon wheel" logging scars are still much in evidence throughout the area. Oak, hackberry, cypress, gum, water elm, maple and locust trees are present along the few canals and the Lake Ponchartrain shoreline.

Manchac is best known for its prime waterfowl habitat, commonly called "The Prairie," located in the southeastern corner of the area. This square mile of mostly open water is normally very shallow and choked with submerged pond weeds such as naiads, coontail and fanwort that provide excellent feeding territory for migrating birds. Numerous small islands provide additional feeding areas. Pirogues, mud boats or "go-devils" are the recommended means of travel in the prairie.

Depending on water conditions, access to the prairie is possible by following various small boat trails leading from the Galva and First Canals. Another route is down Pass Manchac into Lake Pontchartrain and then across a short strip of land just east of the prairie. A boat launch is located a mile and a half north of North Pass along Hwy 51.

Birds commonly hunted are over-wintering mallards, teal, gadwall, widgeon, shovellers, wood ducks, coot, rail and snipe. Also found are ibis, egrets, herons, black-necked stilts, gallinules, sandpipers, gulls, terns, ospreys and an occasional eagle. Rabbits are hunted mostly along the spoil banks of canals and along the lake shore. Permit trapping of alligator, nutria, muskrat, raccoon, opossum and mink is usually allowed each year.

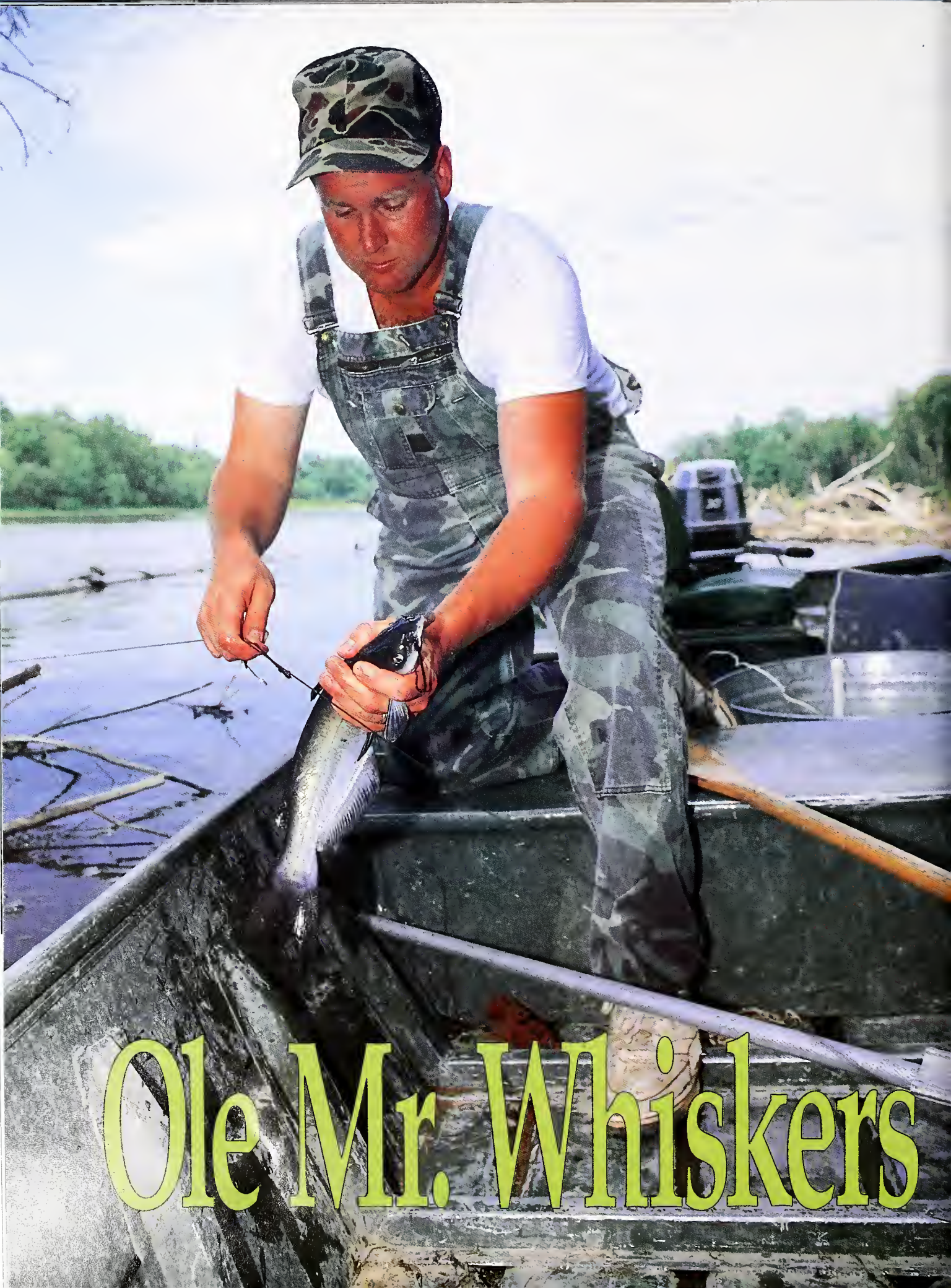
A few canals easily accessible from Pass Manchac provide quiet places for fishermen to try their luck on bass, bream and the ubiquitous catfish. Mullet, gar, bowfin and crabs are also present.

Because of the lack of mature trees with suitable nesting cavities for wood ducks, wildlife personnel have erected about a dozen cypress boxes in different locations on Manchac. Wood ducks have used these artificial nesting structures so well that many more boxes will be set out in the future. In a related project, cypress and oak seedlings have been planted along the lake shore and on spoil banks in an attempt to grow more trees on the area.

Manchac WMA is a piece of public land, within 45 minutes from New Orleans, that serves the needs of fishermen, hunters and birdwatchers alike. ■

**In the early 1800's Manchac was heavily populated with merchantable cypress trees. Today, Manchac WMA is a flat, low, flooded marshland, supporting stands of *Sagittaria*, smartweed, alligator weed and water hyacinth.**

*Photo by LDWF*


Ole Mr. Whiskers

STORY BY DON DUBUC
PHOTOGRAPHY BY JOEY SEDTAL

Catfish are the Rodney Dangerfields of the deep. As a gamefish, they don't get much respect. But just add some spicy seasonings, a little mustard and corn meal and they'll draw as much attention as a full limit of bass or speckled trout any day.

"Opportunity" best describes catfishing. They can be found in just about every freshwater pond, creek, river, bayou and lake throughout the state. Big catfish, including the current state record, can be caught from the bank and many times "hook" themselves, making them a prime target for kids and beginners.

## THE SPECIES

Blue cats, considered the largest of North American catfish, are found in larger waterbodies, especially the state's big rivers. A blue cat can be identified by its light, blue-gray or silver back and sides and white belly and fins. Its tail is forked like that of its close relative, the channel cat.

Channel catfish are possibly the most popular in Louisiana. Found in ponds, as well as small and large river systems, their colors vary from gray to blue-gray. Some even have a yellowish tinge. Younger fish have numerous small black dots which tend to disappear with age.

The flathead catfish is known by many names including yellow cat, tabby cat, Opelousas cat and many others. Flatheads are easily distinguishable from blues and channels by a wide, flat head, square tail and olive green or blotchy yellow color. Flatheads grow large, often reaching 100 pounds. While the real monsters usually come from deep rivers and below dams, some surprisingly large fish have come from very small creeks.

Bullheads, also called mudcats or pond cats, are another common freshwater catfish. Three species are found in Louisiana; the black, the yellow and the brown bullhead which is quite rare. Colors vary depending on water and bottom types of ponds or slow moving streams and small creeks. Most commonly, they range from olive to brown to black. Other catfish include two saltwater species, the sea cat or hardhead and the gaftopsail cat. All but the hardhead (and some will debate this point) are edible.

## FISHING TECHNIQUES

There are more legal methods to fish catfish than any other species. Rod and reel, of course, is an all-time favorite, but handlines, trotlines, jug lines, limb lines, yo-yos, bow and arrow and scuba spears can be used by holders of a basic recreational fishing license. With proper gear licenses catfish, can also be taken recreationally with hoop nets, slat traps, or even cans, pipes, buckets, drums and tires. There is only one "limit" on catfish. Recreational fishermen are limited to a combined total of 25 small catfish comprised of channels under 11 inches, blues under 12 and flatheads under 14 inches per day. There is no creel limit on catfish above the legal minimum sizes.

Catfish are not picky eaters, which is one of their most appealing features. Their diet includes minnows, bream, shrimp, crawfish, worms, insects, frogs and almost anything they can scavenge. Specially prepared cheese, blood and dough baits are effective and many fishermen prefer chicken or nutria livers, or even Ivory soap.

The catfish's bottom feeding tendency, combined with a highly developed sense of smell, calls for bait placed right on or near the bottom. Spinning, spin-casting, bait casting combos and even the reliable cane pole are all suitable for catfishing. For the smaller bullheads and channel cats, 12-to 20-pound test line and 2/0 hooks will do fine, but 50-pound line and 4/0 hooks are inadequate if you're after the really big blues and yellows. While few fly fishermen specifically seek catfish, both fresh and saltwater cats are taken incidentally on floating and sinking flies. Both are also hooked occasionally on artificials. Since catfish feed primarily by smell as opposed to sight or sound, catfish usually will strike a lure either fished very slowly or pulled directly in front of them.

## WHEN & WHERE

Catfish can be caught year round in Louisiana, with spring through fall being the most active periods. Low water conditions are best since this seems to concentrate fish into smaller feeding areas. Night fishing, when cats are on the prowl, is usually more productive than other times. Most anglers wouldn't asso-

**Catfish can be caught year round in the state, with spring through fall being the most active periods.**

**The key to catching the big cats is to find their dens.**

ciate a depth finder with catfishing, but it's probably more important to find catfish "holes and structure" than in bass fishing. The key to catching big cats is to find their dens.

As mentioned earlier, practically every fresh and brackish water body from Shreveport to Venice holds catfish. Recently, however, more and more private ponds have been opened for public "fee-fishing." These facilities will have one or more 1-5 acre ponds stocked with channel cats. They offer clean banks and easy fishing, particularly for city dwellers, youngsters or the elderly. Most of these operations charge a small admission fee and a per pound price for what you catch. For an extra charge, you can have your fish cleaned and filleted.

## CLEANING & COOKING

There is some danger in handling catfish. Nature has provided them with sharp, pointed barbs on their pectoral and dorsal fins. A poisonous venom is imparted to victims thus punctured. The saltwater variety inflicts an extremely venomous and painful sting. Rubbing slime from the fish's body on the wound does provide some immediate relief, but prompt and careful first aid attention should be given to catfish wounds.

A couple of items are available for handling catfish. Spring-type fish grabbers can immobilize a fish while removing a hook. A simple but effective device called a "flipper" is used to return unwanted catfish back to the water or deposit keepers in a fish well or ice chest.

To skin or to fillet catfish is a matter of personal preference. Some prefer thin, crispy fillets, while others believe preparing whole catfish ensures a sweeter, richer flavor.

Catfish skinning pliers make it a fairly easy task, while the standard or electric fillet knife will get the job done in a hurry and eliminates the skinning procedure. What you will have is firm, white, boneless flesh that can be deep fried, baked, broiled, grilled, smoked or made into a courtbouillion (pronounced coo-bee-yawn); a spicy, Cajun stew.

## FOR THE RECORD

Arthur Pierre of New Orleans has always had a lot of respect for catfish. He has spent years fishing the banks of the Mississippi River specifically for big cats.In August 1987, Pierre landed a 98 pound albino blue cat in the Louisiana state fish records. That fish will be tough to beat, but not impossible, as commercial fishermen sometimes land catfish in the 150 pound class. For those wanting to break into the record book, the Louisiana Outdoor Writers Association, the keeper of the official state records, has expanded the catfish categories. Top ten places will now be awarded in three separate divisions for blue, channel and flathead cats. At present, most of those places are unoccupied, so there's never been a better time to do a little "cattin". ■

# Hasenpfeffer

*"Don't kill him! Let the dogs run him!"*

BY MAURICE COCKERHAM
PHOTOGRAPHY BY BOB DENNIE

It didn't take long to strike the first trail. The little rabbit exploded out of a downed tree top as the snuffling beagles finally got the best of his steely nerves. Bedlam reigned for a few seconds as the bundle of brown fur bolted past four hunters amid a rising chorus of excited hound talk.

Johnny Riche was the last in line, and the only man who could possibly get a shot without putting someone's rear end in severe danger. Just as the twelve gauge belched, Stafford Bielkiewicz bellowed, "Don't kill him! Let the dogs run him!"

"I didn't kill him. I just scared him," Johnny grinned.

And run him they did. For about 25 yards. Suddenly, the baying of the beagles turned to the clamorous yipping that told us all Johnny had lied. Sure enough, the rabbit was quickly recovered. Either Riche had connected with a pellet or two, or that rabbit just gave up and died in mid-stride. Nobody believed the latter.

Stafford Bielkiewicz was not a happy man. It was the first rabbit we had jumped and his seven hounds got in less than a minute of running time. Stafford likes to run the hounds more than he likes to kill rabbits and the first rabbit of the day is special. A good run gets the dogs all worked up and hot to hunt. He says he has "the best dogs in the world." He says they won't run an armadillo or a deer. He says, ...well, the man runs a pretty successful business primarily, I think, to feed his 25 beagles. You could say he's real involved with his dogs.

We were hunting a pretty expansive chunk of land belonging to the Grand Lake Rod and Gun Club. This bunch owns 2,200 acres of prime bottomland terra firma (OK, some of it is maybe not so firma.) along the Red River in Avoyelles Parish, and they hold the

lease on an additional 5,000 acres. In addition, there is a total of 3,000 surface acres of water, "owned, not leased," as club member Lee Thevenot puts it. If you get tired of looking at the same scenery all the time, you can wander onto the adjoining Grassy Lake Wildlife Management Area and enjoy another 13,600 acres of the same kind of territory. With just 122 members, some more active than others, there's no problem with folks stepping on each other. They have ducks, deer, rabbits and squirrels all over the place. If you get tired of hunting, you can turn your attention to bass, bream, sac-a-lait and catfish.

In fact, from Lee Thevenot's camp, you can soak a minnow or a worm while you're waiting for the ducks to come in on your decoys, and all within spitting distance of the camp. If the ducks don't cooperate, you stand a fair chance of bagging a squirrel or two out of the back of the blind.

Most of the camps are located in a couple of bunches on some of the highest ground available. Not Thevenot's. He's stuck off on a point with water on three sides most of the time and four sides some of the time. Thevenot says he picked the location himself. Marksville businessman Glen Goudeau, on the other hand, points out that Thevenot is the Avoyelles

**The first rabbit of the day seems to have special meaning to the avid rabbit hunter. Right, club members pose with their beagles at the campsite near Red River in Avoyelles Parish.**

Parish Assessor and adds that Lee is going to remain "banished to the boonies" until their property taxes go down. Fat chance.

Poachers, however, are absolutely unwelcome, and trespassing puts one's social future in jeopardy. The club employs professional Rangeriders...private Game Wardens. Commissioned by the Avoyelles Parish Sheriff's Office, they live on the property and represent law and order with regard to poaching, trespassing and vandalism. This bunch runs a clean, tight ship and they mean to keep it that way.

Meanwhile, the dogs were busy trying to scare up another chase. It had rained all night and most of the morning, which doesn't make for great rabbit hunting, even behind "the best dogs in the world." An abundance of water on the ground tilts the scales a bit in the rabbit's favor. The beagles made several starts, only to lose the scent in areas of standing water.

Then they jumped a cottontail on the edge of an open field. We didn't have to see the quarry to know it was a cottontail. The trail stayed close to hand, with tight turns and circles centered around a patch of thick undergrowth near a natural gas wellhead. It's a sure mark of the common eastern cottontail (*Sylvilagus floridanus*). Weighing only a couple of pounds...four pounds is a big'un...they are a gourmet's delight stewed long and slow with a thick brown gravy. They're pretty good nibblins' fried, too.

This one finally made the fatal mistake of bursting out of briar patch within sight of Johnny. Unfortunately, he also dove under about five thousand pounds of steel tank and scrap iron just as the twelve gauge signaled the end of the chase. After about thirty minutes, we were forced to give it up. Even the frantic dogs couldn't get into that iron fortress. Johnny swore he'd hit the rabbit. Corky Perret wanted to know how the rabbit managed to continue to run to the safety of "an impregnable burrow" while "shot through the heart."

Then it rained again. No one even mentioned calling it quits. Stafford Bielkiwicz and his dogs were having fun and he's a fair-sized guy. We circled back to the trucks, downed some luke warm coffee and a few cold sausage biscuits, and moved a half-mile or so. Same song, second verse.

Then the dogs struck a trail that almost caused heart stoppage in a few of the older canines. The trail was obviously hot enough to burn their feet! This time, the pack went straight away. No turns, no fancy footwork, no zig zagging. In no time at all, the bawling of the pack was faint indeed.

Someone mentioned a deer. Stafford glowered. This was a swamp rabbit. Sometimes called a "cane cutter," the long furred, dark colored *Sylvilagus aquaticus* is quite unlike his smaller cottontail cousin. For one thing, he's larger. Six pounds is not rare, and that's a lot of rabbit. For another, the second half of his scientific name describes both his temperament and his habitat. Unlike the cottontail, which prefers thick undergrowth in upland forests and agricultural areas, swamp rabbits are partial to low lying, wet bottomland, and they take to water like they have gills. Undisturbed, they have a rather strange-looking walking gait, rather than hopping like a cottontail. Disturbed, they tend to run straight, fast and far.

**Thevenot and Bielkiewicz hold eastern cottontails on their way to a great rabbit stew.**

Eventually, however, even the swamp rabbit will circle and return to his starting point. If the dogs can stay on the trail and sort out the water barriers, the gunner has only to be patient and hope he's in the right spot when the swamper returns.

Finally, the sound of the hounds began to grow louder. They'd stayed with that rabbit for well over a mile of muck and mire. Maybe they were "the best dogs in the world."

This time, Glenn Goudeau was in the right spot at the right time. The dark brown fur ball was lazing along, literally sneaking back to his home turf. Chalk up one more rabbit stew.

By that time, the rain had started again. With a score of two-for-three, we retired to the camp. Although yours truly had to be elsewhere the next day, the rest of the crew vowed to test Stafford's dogs again the following morning.

Looking back to that day reminds me of what I really enjoy about hunting. We only brought two rabbits to bag, with only three shots fired all day. Nobody minded at all. Good friends, plus good dogs, plus good woods and waters equal fantastic times and great memories. ■

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Photo by LDWF

# King Mackerel

BY PHYLLIS DARENSBOURG

The United States coastal waters are home to the mighty king mackerel. In warmer months of the year particularly, the king mackerel enjoys the comfort of the salty Gulf waters off the Louisiana and Florida coasts. Yet, king mackerels can be found from Massachusetts to Rio de Janeiro, Brazil.

The king mackerel is among the most popular offshore sport fish especially since it is accessible to thousands of sportsmen even with modest size crafts. King mackerel, also called kingfish, are fished commercially but fisheries officials manage over-fishing of this species by setting size limits, daily takes, and open/closed seasons.

*Scomberomerus cavalla* is a member of the tuna family. Unlike, its cousins, the kings have large, sharp, blade-like teeth filling the jawbones with enough grasping and slashing power to kill most prey. The body is streamlined, sleek and fast and, while kings are not designed with the staying power of the tunas, they are peerless when speed and agility are

Photo by LDWF

King mackerel are among the most popular of Louisiana's offshore sport fish.

combined. The mackerel, bonito, and tuna family of fish (*Scombridae*) share a number of design features which immediately indicate their birthright. These features are: a row of individual finlets following the dorsal and anal fins; two or more keels at the base of the tail-fin; a strongly forked, thin tail-fin.

Specifically, the mackerels have 15 to 18 dorsal spines. The king mackerel is easily separated from the spanish mackerel (*Scomberomerus maculatus*) by the sharp drop in the lateral line under the soft dorsal fin. In the spanish, the lateral line is fairly smoothly arched, with no obvious abrupt drop. Also the dorsal fin of kings is fairly uniform in pigmentation, whereas the spanish and cero (*Scomberomerus regalis*) mackerels have the anterior thirds of the dorsal jet black, the latter portion markedly lighter.

Kings may reach a length of six feet or more and reach a weight of more than one hundred pounds. The world record catch for the king is 90 pounds, taken off Key West, Florida in 1976. Louisiana state records show the biggest catch taken by W.D. Lamb in December, 1980 at 82 pounds.

They spawn during late spring and summer in the northern gulf, most intensively in later summer, in middle to outer continental shelf waters. King mackerel usually travel in small schools and prefer slightly deeper water than spanish mackerel, although large kings are often caught well within sight of land, and along coasts with fairly steep dropoffs. Anchovies, shad, sardines, small jacks and other members of the herring family are the favored food of the kings.

Saltwater anglers should be aware of both recreational and commercial regulations regarding king fish. Regulations are set forth by the state Department of Wildlife and Fisheries and two federal agencies, the Gulf of Mexico Fishery Management Council and the National Marine Fisheries Service.

Commercial rules allow the use of hook and line and run around gill-nets only when taking kings. Both recreational and commercial regulations require this fish to be landed with head and fins intact.

As a final note, king mackerel have been confused with the wahoo (*Acanthocybium solanderi*) and under competitive situations this could mean trouble. An easy way to recognize the wahoo is by its tail; its upper and lower parts are straight up and down (king's have a distinct arch to the tail-fin). Other distinguishing factors include a longer snout and the absence of gill rakers in the wahoo. ■

# A CLOSER LOOK

By Lyle M. Soniat, Ph.D.
and Eleanor Abrams
*Louisiana Sea Grant College Program*

In the backwater bayous, misty marshes, and stately cypress swamps, hundreds of thousands of game fish lurk. Anglers cast lines at all hours, trying to catch one (or more) of the finned creatures. They use their favorite bait, fishing equipment and lucky charms to insure a good catch, hoping for that elusive trophy.

In order to assure a good supply of healthy game fish and help preserve Louisiana's reputation as a "Sportsman's Paradise," Louisiana's Department of Wildlife and Fisheries (LDWF) is involved in fisheries management. Fisheries management is synonymous with conservation. A well-managed fishery has an environment in which the fish are healthy and better able to reproduce. Fishermen benefit by being able to catch the species known for their fight or taste. Fisheries managers develop and enforce regulations in order to prevent the species' populations from being depleted.

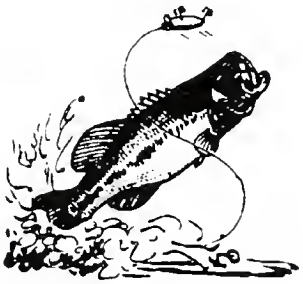
Researchers at governmental agencies usually initiate the recommendations which eventually become laws, policies and regulations to protect and enhance fisheries. To recommend plans to manage the various species of fish, fisheries managers first have to study the species *population dynamics*. To set the catch and size limits for each species, managers must know the environmental factors that control the birth and death rates of fish in a particular lake or pond. See the last Education Corner (September / October 1992) for an in-depth discussion on population dynamics.

Each body of water has its own aquatic system, climate, and chemistry. These systems have a certain carrying capacity or number of fish that can be supported by the habitat's resources. (A *habitat* is defined by the amount of food, water, cover and space available for a species.) Fish in excess of this carrying capacity will die because of a lack of resources to support them. Not only does mortality increase, but an overabundance of fish can stunt the growth of all the fish in that area. However too few fish in a lake, while they will grow large and healthy, might not reproduce enough young to keep the lake stocked year after year.

The objective of size and creel (quantity) limits is to harvest only those above carrying capacity. By harvesting the excess fish, survivors grow large and can repopulate the water. Fishermen, in turn, provide the critical income necessary to support research through fishing license fees and a tax on fishing equipment.

Fishing regulations are also designed to prevent overutilization. If fishermen were allowed to take as many fish as they could catch, some popular species of game fish like striped bass and sac-au-lait would be quickly depleted. Regulations tell the fishermen the size and number of fish they can keep, protecting fish that haven't had a chance to spawn or lay eggs. All of these rules insure that the lake or pond will be filled with a healthy and productive fish population in the future.

*Fish in excess of this carrying capacity will die because of a lack of resources to support them.*



*The objective of size and creel (quantity) limits is to harvest only those above carrying capacity.*

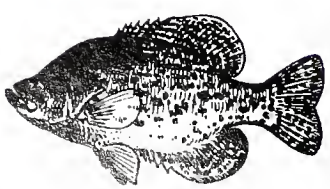
To create a healthier and more plentiful fish population, LDWF researchers must measure, weigh, and study a sample of fish from a lake or pond. They take fish out of a small area and study them, hoping that the small area is representative of the rest of the lake or pond. Sometimes a chemical called Rotenone is used to bring the sample fish to the surface. The chemical is deposited in a small area of the lake. Rotenone attaches to the gills of the fish, suffocating them almost instantly. The chemical, a plant root extract, looses its effect quickly in water allowing LDWF researchers to collect the needed sample without hurting the other fish in the lake.

The researchers can learn a lot about the contents of the lake from one sample of fish. From the sample, the researchers can calculate how many fish were spawned that year. In addition, all fish from the small fingerlings to the top of the food chain can be studied providing a clear picture of the population .

Other methods are used to study the contents of a lake or pond. Electrofishing (stunning any fish with an electrical current) allows biologists to gather some information while not permanently damaging the fish. Some species are more susceptible to shocking than others, so all fish species are not represented in a sample. Trawling, seining or gill netting are other ways to gather information on certain sizes or species types.

*Without your support in following the regulations, laws and policies that result, the research is useless.*

This article was centered on fisheries, but the principles of "carrying capacity" and "population dynamics" apply to all living resources, including other game and non-game species. To use these resources wisely, they must be carefully managed. However, without your support in following the regulations, laws and policies that result, the research is useless. The most important component of any resource management plan is the public. Each of us can be resource managers by acting as responsible sportsman. Release throw-aways gently with minimal handling. When you limit on a species, don't throw those smaller, previously-caught fish overboard to keep a larger one. Even if the smaller one is still alive, it is unlikely to survive. These simple actions can help conserve our natural heritage, and make our waterways places that our children and their children can always enjoy.



## ACTIVITY

The principles of resource management may be clearly understood if we look at it from another perspective.

- What would happen if you planted too many cucumber seeds in a small, backyard garden? *(Initially many would germinate and grow. As the seedlings grew, they would crowd one another and compete for habitat requirements such as sunlight, water, and nutrients. Their growth would slow and mortality would result in the loss of some of the seedlings.)*
- What does "carrying capacity" have to do with this analogy? *(There were more seeds than the land could support.)*
- Using this example, how could you manage this resource? *(Weed out some of the seedlings, to insure the necessary habitat or space requirements to the survivors.)*
- What could the effect be on the soil if you didn't weed? *(The nutrients could be depleted, lowering the carrying capacity of the land, thereby fewer seedling would survive.)*
- What would happen if you planted the correct number of seeds in your garden, but let all of your neighbors pick all the vegetables as soon as they appeared on the vine? *(There would be no seed left for your garden next year.)*
- You should also allow your vegetables the optimum amount of time to grow in order to get the best vegetable in terms of size and taste. What limits could you institute to insure that each of your neighbors could share in your garden and still have cucumber seeds for next year's planting? *(Limit the number and size of the cucumbers the neighbors could pick.)*
- If you decided that you wanted more and larger cucumbers, what are your options? *(Only use large size cucumber seeds and try to artificially raise the carrying capacity of the land. Fertilizing the ground, increasing the sunlight by sun lamps, germinating and growing the seeds in a greenhouse before the planting season are some methods to raise more cucumbers.)*

# LAW LINES

## Behind the Badge

BY CAPT. KEITH LACAZE

The protection of wildlife is a specialized form of law enforcement. The training required to produce a wildlife agent must go far beyond the basic training other police officers in more urbanized environments receive. The job calls for an individual with a thorough knowledge of the law, the land, wildlife and people.

Within this unique profession there are even more specialized units. These units consist of wildlife officers who have additional enforcement responsibilities associated with specific sections of conservation law. They also act as reinforcements for the regional officers when extra manpower is needed.

The LDWF Enforcement Division has a number of specialized units. Among these are the Saltwater Enforcement Patrol (SWEP), the Oyster Strike Force (OSF) and the Statewide Strike Force (SSF).

The SWEP Unit includes nine officers based in the New Orleans area. These agents are all Loran and Radar certified and hold 100 net ton Ocean Operators licenses. They keep watch over the coastal waters of the state and primarily enforce commercial fishing regulations. This unit has been extremely effective in halting illegal gill netting and closed season shrimp trawling.

SWEP has two offshore patrol boats, the 65 foot Rip Tide and the 47 foot Delta Tide. Both boats are equipped with the latest technological advances in marine surveillance and detection. Their distinctive white over gray hulls with the Enforcement Division's green slash and shield are a welcome sight to boaters in distress and bad news for offshore violators.

The Oyster Strike Force is a relatively small unit of four agents who specialize in shellfish enforcement. The OSF was originally formed in 1989 at the request of oyster producers in Louisiana. Funding is derived from oyster harvester license fees.

OSF agents concentrate on the prevention of illegal oyster harvest from polluted areas, oyster theft from legal leases and enforcement of all license requirements and tagging regulations. They are equipped with 19 foot Guardian class inshore patrol boats, Global Positioning Satellite Systems, Radar and night vision equipment. These officers have been instrumental in restoring public confidence in the purity of Louisiana oysters.

Another unit within the Enforcement Division is the Statewide Strike Force. This 18-man force consists of two agents from each of the nine enforcement regions in Louisiana. The agents function as regular regional officers until the SSF is activated. At that time they travel to any location in the state where a larger enforcement presence is needed.

The Strike Force was implemented in 1990 in response to the need for additional officers for temporary duty in certain areas. The inshore shrimp season and opening weekends of deer and duck seasons are typical examples. At these times, the regional officers in high activity areas need additional help. Also, during emergencies such as Hurricane Andrew, strike force agents can respond quickly and move in to assist with rescue and relief operations.

SSF agents can act as an entire 18-man unit or in two or four man teams. They have been very successful in stopping the transport of undersize or otherwise illegal commercial seafood and have made numerous arrests for closed season and night hunting.

These are three of several special units within the Enforcement Division. Specialization, the latest training advances and top quality equipment are all essential in order to protect our fish and wildlife resources in Louisiana today. ■

Photo by LDWF

**SWEP agents are pictured handling gill nets while keeping watch over coastal waters of the state.**

notes CONSERVATION

## Burt Angelle Receives Special Recognition

Former Wildlife and Fisheries Secretary J. Burton Angelle, Sr. was named the 1992 recipient of the "Charles H. Lyles" Award at ceremonies in Alabama this October.

The "Charles H. Lyles" Award is given by the Gulf States Marine Fisheries Commission to an individual, agency or organization which has contributed to the betterment of the fisheries of the Gulf of Mexico through significant biological, industrial, legislative, enforcement or administrative activities.

Angelle was recognized for his public service and support of programs aimed at improving the state's fish and wildlife populations. Angelle served as Secretary of the Louisiana Department of Wildlife and Fisheries for 13 years.

Pictured below (left to right): Rep. Frank Patti, J. Burton Angelle, LDWF Asst. Secretary, William "Corky" Perret, Leroy Kiffe, representative of the Gulf States Marine Fisheries Commission and Charles Lyles, originator of the award.

*Photo by LDWF*

## Non-Consumptive User Fees in Louisiana

Beginning July 1, 1993, citizens who enjoy the Department of Wildlife and Fisheries Wildlife Management Areas or Refuges for activities considered non-consumptive will be required to pay a user fee.

According to Act 193 of the Louisiana State Legislature anyone visiting department managed land, who does not already have a fishing or hunting license, must purchase a Wild Louisiana Stamp at the cost of ten dollars. The stamp will be available in the spring of 1993.

This new Wild Louisiana Stamp program will be modeled after the Duck Stamp Program. Each year a contest will be conducted for artists native to or domiciled in Louisiana, in order to select a stamp image.

LDWF Wildlife officials believe the program will generate over $100,000 the first year and monies generated will be deposited in a Natural Heritage Account in the state's Conservation Fund. The law stipulates that the fund is dedicated to non-game activities. Interested persons wishing to comment may send written comments to Wild Louisiana Stamp, Attention: Gary Lester, LDWF, P.O. Box 98000, Baton Rouge, LA 70898.

## Boat User Fee Repealed

The recreational boat user fee imposed by the federal government two years ago has now been repealed. Some 4.1 million boat owners around the country are affected by this, explained Lt. Col. Charles Clark of the LDWF Enforcement Division.

Under the terms of H.R. 2152, the boat user fee which required an annual sum of twenty dollars and up to be paid to the federal government, will be phased out over a two year period. Effective immediately, all boats 21 feet and under are no longer required to purchase and display the user fee decal. Larger boats will be exempted over a phase-out period through October 1994.

## Lifetime License Holders

| | |
|---|---|
| James S. Maddux | Lafayette |
| Hubert J. Meche | Fields |
| Richard L. Mecom | Covington |
| James M. Morgan | Plain Dealing |
| Paul D. Odom | Ville Platte |
| Jamie M. Tassin | Marksville |
| Bruce A. Underwood | Minden |
| Eugene J. White | Braithwaite |
| Charles J. Acaldo | Gonzales |
| Herman R. Allen | Athens |
| Robert J. Deffner | Ponchatoula |
| Gregory J. Ducote | Baton Rouge |
| Conway Farrel | New Orleans |
| John H. Gill | Greensburg |
| John E. Jackson | Lake Charles |
| Terry L. Jones | Bogalusa |
| Irvin J. Lacrouts | Metairie |
| James W. Layssard | Noble |
| Thomas J. Lee, Sr. | Kenner |
| Thomas J. Lee, Jr. | Kenner |
| Cassell D. Lehr | Zwolle |
| Michael D.Lizana | Slidell |
| Thomas J. Maggio | Ville Platte |
| Stephen Minvielle | New Iberia |
| Robert W. Quirk | Washington |
| John J. Rush | Greenwell Springs |
| Barrett Alldredge | Lafayette |
| Gerald W. Andrews | Sibley |
| Bryan L. Bossier | Woodworth |
| Clifford C. Comeaux | Baton Rouge |
| James M. Cook | Clinton |
| Hardeman Cordell | Monroe |
| Sherrouse Cordell | Monroe |
| Hardeman V. Cordell | Monroe |
| Timothy O. Donnelly | Slidell |
| Melanie Estopinal | Gretna |
| Wade J. Estopinal | Gretna |
| Christopher Faia | Metairie |
| Chester L. Fornea | Angie |
| William W. Guidry | Lafayette |
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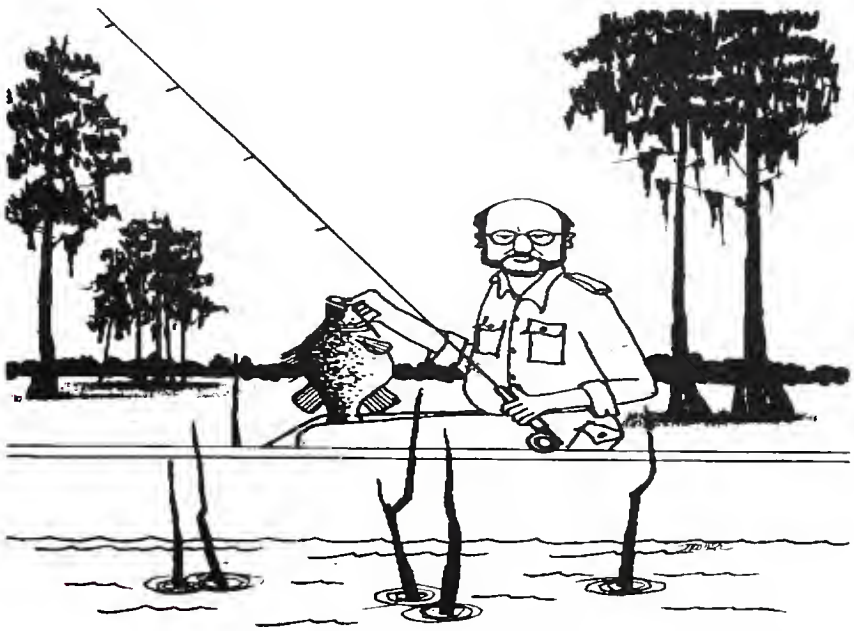
# Jaybirds, Mudcats and Grinners

## FUNNY SIDE UP

BY GLYNN HARRIS



I'm a writer and, as such, I have more than a casual interest in words. Recently, I noted a plaque on the desk of a fellow writer with a message that conveyed my profession's interest in words. "Words is my tools", quoth the plaque. I'm still not too sure about correct grammar usage in this pithy saying. The word "is" seems to be incorrect. Somehow, "am" has a better ring to it, don't you think?

Whether you choose to use "is" or "am" is not important, because it has absolutely nothing to do with this article. What is important, however, is how word usage varies depending upon which part of the country you're from. Take "crawfish" for example. That's what we call them here in Louisiana. Imagine the looks you'd get if you were to walk into a Louisiana seafood eatery and order crayfish. If you were a fly on the wall you'd hear the waitress tell the cook, "Hey Antoine, we got us a Yankee over there at the table wanting....heh,heh....crayfish." Actually, this scenario would never take place. Know why? Anybody calling a crawfish a crayfish wouldn't eat one. They view them in the same light as they do night crawlers; fish bait.

According to the American Heritage dictionary, "crawfish" is a verb and the definition is "to withdraw from a situation". Where do the American Heritage bean-heads think the verb "crawfish" came from anyway? It comes from the creature, "crawfish", which has the habit of "withdrawing from a situation" by backing out when something is after it, right?

Look up the word crayfish, however, and you'll find the description of a "freshwater crustacean resembling a lobster but considerably smaller".

And if that's not insulting enough, a recent issue of a national outdoor magazine, published in (where else?) New York, says that "only in Louisiana is the crayfish called crawfish". Wait a minute....you're trying to tell me that folks around Yazoo City, Mississippi say crayfish? Yeah, right.

And it doesn't stop with mudbugs. Take game fish, for example. If you live north of Alexandria, and you catch a perch-shaped fish, silvery in color, with spots on its sides, you naturally turn to your buddy and say, "Boy, ain't that one sho'nuff fine slab of a white perch?"

Move up north of the Mason-Dixon line, repeat the scene, and the words you hear are likely to be, "Say, could you pass the gray poupon, and white you're at it, take a look at this lunker crappie?" (Pronounced crop-py.)

Over along the southeastern seaboard, from Florida to the Carolinas, the same fish is called a crappie, but it's pronounced crap-py. (Here in the Bayou State, craps is something we shoot...or step over.)

Want to complicate it even more? Even in Louisiana, "THE ONLY STATE THAT CALLS A CRAYFISH A CRAWFISH", we're can't seem to agree on the name of the pan fish in question. South of Alexandria, the exclamation you're likely to hear is, "Hey Toussaint....come see....me, I done caught me one uh dem big ole sock-uh-lay!"

Wait.....there's more...

Here in Louisiana, and throughout the south, there are several species of catfish, and one of the more frequently-caught ones is what we all call a mudcat. Elsewhere, they're bullheads. And to complicate matters, they come in three colors; yellow bullheads, black bullheads and brown bullheads. Down here, a mudcat is a mudcat.

And what about the ugly, prehistoric grinner, you're sure to tie into in the back of any slough in which you chunk a spinner bait? Up north, they're bowfins. Wanna confuse it even more? Show one to a south Louisiana fisherman who'll whoop with excitement at the prospect of cooking up a koo-be-yawn with the fish he calls a shoe-pick.

Finally, there are jay birds, those loud-mouthed, rambunctious members of the bird world. Elsewhere, they're blue jays. Which leads me naturally to my next question. When someone in the nude is referred to as "naked as a jay bird", what exactly does that mean? Did you ever see an unclad jay bird? Me neither. But then again, I can't tell a grinner from a shoe-pick, and I never ate any koo-be-yawn, so what do I know?

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# Bayou Kitchen

by Wayne Miller

Photo by Ken Glaser

## Catfish with Pecans

- 6 6-oz. catfish fillets
- 8 oz. pecans
- 10 oz. flour
- 3 tbsp. vegetable oil or butter

*Sauce*

- 1 large cucumber, peeled, seeded and finely diced
- 8 oz. heavy cream
- 8 oz. unsalted butter, cut into 8 pieces
- 1/8 teaspoon vanilla extract
- Salt and pepper to taste
- 4-5 plum tomatoes, peeled, seeded finely diced

Prepare sauce by bringing cream, cucumber and vanilla to boil. Reduce slightly. Whisk in butter one piece at a time. Season with salt and pepper. Add tomatoes. Set aside.

Grind pecans and flour in food processor to make "Pecan Meal". Dredge fillets in meal and saute in non-stick pan over high heat until done and nice color. Spoon sauce onto warm plates. Arrange fillets on pool of sauce. Garnish with lemon slices. Serves 6.

## Dilled Potato Pancakes

- 2 medium baking potatoes, peeled and grated
- 1 large egg, beaten to blend
- 1/2 teaspoon minced fresh dill or 1/2 teaspoon dried dill
- Salt and fresh ground pepper
- Vegetable oil (for frying)

Place grated potato in medium bowl. Cover with cold water. Let stand 10 minutes. Drain. Pat dry with paper towels. Combine potato, egg and dill in medium bowl. Season with salt and pepper.

Pour enough oil into large heavy skillet to come 1/4 inch deep on the sides.. Heat to 350 degrees F. Spoon potato mixture into skillet by 2 heaping tablespoonfuls; flatten with spatula to 4 inch cakes. Cook until golden brown, 3 to 4 minutes per side. Drain on paper towels. Serve immediately. Serves 6.

## Carnival Coleslaw

- 3/4 cup mayonnaise
- 6 tablespoons tarragon vinegar
- 2 tablespoons (generous) Dijon mustard
- 1/4 teaspoon prepared horseradish
- 1 tablespoon sour cream
- 1 medium green cabbage head, finely chopped
- 1/2 medium red cabbage head, finely chopped
- 4 large carrots, peeled and grated
- 6 green onions, sliced
- Salt and pepper to taste

Blend mayonnaise, vinegar, mustard, horseradish and salt in blender or processor. Cover and refrigerate at least overnight. (Stir before using.) Mix sour cream into dressing. More sour cream can be added for an even more mellow flavor if desired.

Combine all remaining ingredients in large bowl. Pour cold dressing over and toss to coat thoroughly. Add fresh cracked pepper to taste. Serves 6.